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(US). **DIRKSE, Hendricus, Arien** [NL/NL]; Badhuisweg 3, NL-1031 CM Amsterdam (NL).

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(71) Applicant (for all designated States except US): SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V. [NL/NL]; Carel van Bylandtlaan 30, NL-2596 HR The Hague (NL).

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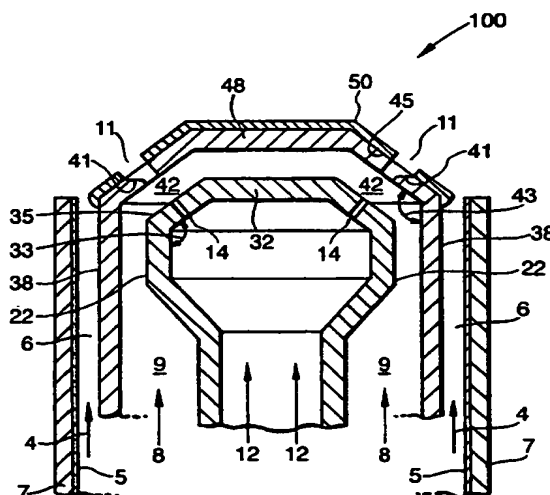
(72) Inventors; and

(75) Inventors/Applicants (for US only): CHEN, Ye-Mon
[US/US]; 2215 Bent River Drive, Sugar Land, TX 77479

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(54) Title: FEED INJECTION SYSTEM FOR CATALYTIC CRACKING PROCESS



(57) Abstract: A nozzle for use in a fluid catalytic cracking unit comprising: a first conduit for providing a passageway for enabling a first dispersing gas to flow therethrough; a first cap covering the end of said first conduit, said first cap including at least one outlet passageway therethrough adapted for discharging said first dispersing gas into a liquid hydrocarbon feed material; a second conduit enclosing said first conduit and spaced therefrom to form an annulus therebetween thereby providing a passageway for enabling said liquid hydrocarbon feed material to flow therethrough; a second cap covering the end of said second conduit, said second cap being spaced from said first cap thereby forming a mixing zone therebetween for mixing said liquid hydrocarbon feed and said first dispersing gas and said second cap including at least one circular slot as outlet passageway therethrough, which passageway is substantially aligned with the outlet passageway on said first cap and is adapted for discharging said mixture of said liquid hydrocarbon feed and said first dispersing gas.

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